

OIL ANALYSIS REPORT

Area 412 Machine Id 273 BANBURY MOTOR

Outboard Journal Bearing Fluid ESSO NUTO H ISO 68 (1 QTS)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

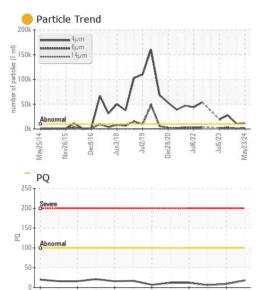
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

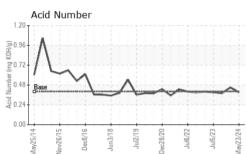
Sample Rating Trend

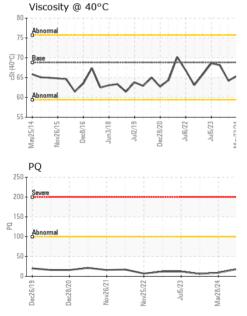
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0912082	WC0838926	WC0838936
Sample Date		Client Info		23 May 2024	28 Mar 2024	10 Nov 2023
Machine Age	hrs	Client Info		0	0	6
Oil Age	hrs	Client Info		0	720	0
Oil Changed		Client Info		N/A	Changed	Changed
Sample Status				ATTENTION	ATTENTION	ABNORMAL
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		18	9	6
Iron	ppm	ASTM D5185m	>60	0	0	0
Chromium	ppm	ASTM D5185m	>20	0	<1	0
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>4	0	2	<1
Lead	ppm	ASTM D5185m	>250	0	0	<1
Copper	ppm	ASTM D5185m	>125	1	<1	<1
Tin	ppm	ASTM D5185m	>80	<1	2	4
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES						
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1 0	history2 0
	ppm ppm	ASTM D5185m	0			
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	0	0	0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	0 0	0 0 <1	0 6
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m	0	0 0 0	0	0 6 0
Boron Barium Molybdenum	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0	0 0 0 0	0 0 <1 0	0 6 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 5	0 0 0 <1	0 0 <1 0 5	0 6 0 0 1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 5 50	0 0 0 <1 52	0 0 <1 0 5 58	0 6 0 0 1 51
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 5 50 330	0 0 0 <1 52 334	0 0 <1 0 5 58 311	0 6 0 1 51 338
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 5 50 330 420	0 0 0 <1 52 334 427	0 0 <1 0 5 58 311 411	0 6 0 0 1 51 338 418
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 5 50 330 420 3100	0 0 0 <1 52 334 427 3606	0 0 <1 0 5 58 311 411 5718	0 6 0 1 51 338 418 3217
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	0 0 0 5 50 330 420 3100 limit/base	0 0 0 <1 52 334 427 3606 current	0 0 <1 0 5 58 311 411 5718 history1	0 6 0 1 51 338 418 3217 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 0 5 50 330 420 3100 limit/base	0 0 0 <1 52 334 427 3606 current 2	0 0 <1 0 5 58 311 411 5718 history1 5	0 6 0 1 51 338 418 3217 history2 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	0 0 0 5 50 330 420 3100 limit/base >50	0 0 0 <1 52 334 427 3606 <u>current</u> 2 1	0 0 <1 0 5 58 311 411 5718 history1 5 0	0 6 0 1 51 338 418 3217 history2 3 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 5 50 330 420 3100 limit/base >50 >20	0 0 0 <1 52 334 427 3606 <u>current</u> 2 1 0	0 0 <1 0 5 58 311 411 5718 history1 5 0 <1	0 6 0 1 51 338 418 3217 history2 3 0 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 5 50 330 420 3100 limit/base >50 >20 limit/base	0 0 0 <1 52 334 427 3606 current 2 1 0 0 current	0 0 <1 0 5 5 8 311 411 5718 history1 5 0 <1 5 0 <1 history1 0 10577	0 6 0 1 51 338 418 3217 history2 3 0 <1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 5 50 330 420 3100 limit/base >50 >20 limit/base >10000	0 0 0 1 52 334 427 3606 current 2 1 0 current 11739 1386	0 0 <1 0 5 58 311 411 5718 history1 5 0 <1 history1	0 6 0 1 51 338 418 3217 history2 3 0 <1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 5 5 330 420 3100 3100 3100 >50 >20 imit/base >20 imit/base >20 20 20 20 20 20 20 20 20 20 20 20 20 2	0 0 0 1 52 334 427 3606 current 2 1 0 current 11739 1386 40	0 0 3 3 5 5 8 311 411 5718 history1 5 0 3 3 10577 1004 24	0 6 0 1 51 338 418 3217 history2 3 0 <1 kistory2 1 27554 € 27554 2781 102
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	0 0 0 5 5 330 420 3100 3100 3100 >50 >20 20 <u>imit/base</u> >20 >10000 >2500 >160 >40	0 0 0 2 3 3 3 4 2 3 606 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 <1 0 5 5 8 311 411 5718 history1 5 0 <1 5 0 <1 10577 1004 24 6	0 6 0 1 51 338 418 3217 history2 3 0 <1 history2 2 8 27554 2781 102 34
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5647 ASTM D7647 ASTM D7647 ASTM D7647	0 0 0 5 5 5 0 330 420 3100 3100 3100 2500 20 20 20 20 20 20 20 20 20 20 20 20 2	0 0 0 2 3 3 3 3 4 2 3 606 current 2 1 0 current 2 1 0 0 current 1 1739 1386 40 10 0 0	0 0 <1 0 5 5 8 311 411 5718 history1 5 0 <1 5 0 <1 10577 1004 24 6 0 0	0 6 0 1 51 338 418 3217 history2 3 0 <1 history2 ↓ 27554 ↓ 27554 ↓ 2781 102 34 3 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	0 0 0 5 5 5 0 330 420 3100 3100 3100 2500 20 20 20 20 20 20 20 20 20 20 20 20 2	0 0 0 2 3 3 3 4 2 3 606 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 <1 0 5 5 8 311 411 5718 history1 5 0 <1 5 0 <1 10577 1004 24 6	0 6 0 1 51 338 418 3217 history2 3 0 <1 history2 2 8 27554 2781 102 34



Jec26/







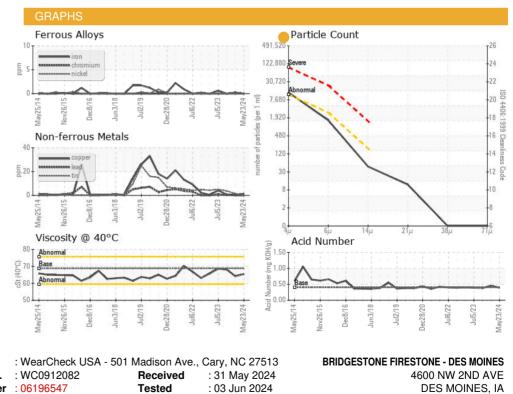
OIL ANALYSIS REPORT

FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	.40	0.39	0.45	0.38
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	68.8	65.4	64.2	68.1
SAMPLE IMAGES	3	method	limit/base	current	history1	history2

Color



Bottom



: 03 Jun 2024 - Don Baldridge





Sample No. Lab Number : 06196547 Unique Number : 11058670

Test Package : IND 2 (Additional Tests: PQ, PrtCount) To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Diagnosed

Report Id: BRIDES [WUSCAR] 06196547 (Generated: 06/03/2024 14:30:45) Rev: 1

Contact/Location: SCOTT CARTER - BRIDES

US 50313

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F: x:

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